SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Main Office
818 West Seventh Street
12th Floor
Los Angeles, California
90017-3435

t (213) 236-1800
f (213) 236-1825

www.scag.ca.gov

MEETING OF THE

PLANS & PROGRAMS TECHNICAL ADVISORY COMMITTEE

Thursday, May 17, 2007
9:00 a.m. – 12:00 p.m.

SCAG Offices
818 W. 7th Street, 12th Floor
San Bernardino Conference Room
Los Angeles, CA 90017
(213) 236-1800

Video Conference Location
SCAG Inland Empire Office
3600 Lime Street, Suite 216
Riverside, CA 92501
(951) 784-1513

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PLANS & PROGRAMS TECHNICAL ADVISORY COMMITTEE

AGENDA

PAGE# TIME

"Any item listed on the agenda (action or information) may be acted upon at the discretion of the Committee".

1.0 CALL TO ORDER & INTRODUCTIONS — **Ty Schuiling, Chair**

2.0 PUBLIC COMMENT PERIOD

Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of the Committee, must fill out and present a speaker's card to the assistant prior to speaking. A speaker's card must be turned in before the meeting is called to order. Comments will be limited to three minutes. The chair may limit the total time for all comments to twenty (20) minutes.

3.0 CONSENT CALENDAR

3.1 Approval Items

3.1.1 Approve Minutes of March 15, 2007
Attached

4.0 DISCUSSION ITEMS

4.1 Air Quality Conformity *AQMPs/SIPs, emission budgets, and conformity.*	**Jonathan Nadler, SCAG**	**20 min.**
4.2 RTP Update Schedule and Strategy *Process and milestones.*	**Naresh Amatya, SCAG**	**20 min.**
4.3 RTP Baseline System Gaps/Deficiencies *To include conclusion of base year gaps/deficiencies discussions.*	**Tarek Hatata, System Metrics**	**40 min.**
4.4 Goods Movement *Existing conditions in freight/goods movement.*	**Sarah Catz, SCAG Consultant**	**15 min.**
4.5 Congestion Mitigation Fee *Report on recent efforts by LACMTA.*	**Brad McAllester, LACMTA**	**15 min.**

PLANS & PROGRAMS TECHNICAL ADVISORY COMMITTEE

AGENDA

4.6 RTP Revenue Model *Final Draft Revenue Forecast to be forwarded to TCC.*	**Annie Nam, SCAG**	**15 min.**
4.7 RTP Security and Emergency Preparedness *Staff efforts to address SAFETEA-LU requirements.*	**Alan Thompson, SCAG**	**15 min.**
4.8 Regional Transit Needs Assessment *Existing conditions.*	**Andre Darmanin, SCAG**	**15 min.**
4.9 RHNA Appeals *Status report on appeal and revision determinations.*	**Joe Carreras, SCAG**	**15 min.**

4.10 Standing Items

4.9.1 Highways & Arterials
No report

4.9.2 Non-motorized / TDM
No report

5.0 STAFF REPORT

No report

6.0 ADJOURNMENT

The next meeting of the Plans & Programs Technical Advisory Committee will be held at the SCAG offices on Thursday, June 21, 2007.

Plans & Programs Technical Advisory Committee (TAC)
of the
Southern California Association of Governments

March 15, 2007

Minutes

THE FOLLOWING MINUTES ARE A SUMMARY THE PLANS & PROGRAMS TECHNICAL ADVISORY COMMITTEE (TAC) MEETING. THE AUDIO CASSETTE TAPE OF THE ACTUAL MEETING IS AVAILABLE FOR LISTENING IN SCAG'S OFFICE.

The P&P TAC held its meeting at the SCAG Headquarters in Los Angeles. The meeting was called to order by Ty Schuiling, Chair, SANBAG.

Members Present:

Ty Schuiling, Chair	SANBAG
Miles, Mitchell, Vice-Chair	LADOT
Shefa Bhuiyan	Caltrans-District 8
Dana Gabbard	So. Ca. Transit Advocates
John McDermott (for Bill Gayk)	Riverside County TLMA
Lori Huddlesston	LACMTA
Jack Humphrey	Gateway Cities COG
Paula McHargue	LAWA
David Mootchnik	So. Cal. Commuters Forum
Gail Shiomoto-Lohr	Orange County COG
John Stesney	LACMTA
Jim Stewart	SCCED
Tony Van Haagen	Caltrans–District 7
Carla Walecka	Transportation Corridor Agencies
Scott Martin	Center for Demographic Research
Michael Litschi	OCTA
Jeff Hamilton	City of Glendale
Bob Cheung	KOA
Frances Lee	Caltrans-District 7
Craig Hoshijima	Public Financial Management
David Sosa	Caltrans-District 7

Via Conference Call:

Dr. Paul Fagan	Caltrans-District 8
Brian Kuhn	City of Palmdale
Steve Levy	Center for the Continuing Study of the California Economy

SCAG Staff:

Naresh Amatya	Annie Nam
Bob Huddy	Mike Jones
Andre Darmanin	Akiko Yamagami
Frank Wen	Tarek Hatata (System Metrics)
His-hwa Hu	Bill McCullough (System Metrics)
Keith Killough	
Shawn Kuk	

1.0 CALL TO ORDER AND INTRODUCTIONS

Ty Schuiling, Chair, called the meeting to order at 10:10 am. Introductions were made.

2.0 PUBLIC COMMENT PERIOD

There were no public comments.

3.0 CONSENT CALENDAR

3.1 Approval Items

3.1.1 Approve Minutes of February 15, 2007

Members reviewed minutes and recommended the following changes:

- Gail Shimoto-Lohr on behalf of Deborah Diep (Center for Demographic Research) requested that the following comments be included to Ms. Diep's comments on page 3, paragraph 2, of the minutes: distinct and if there is a separate RHNA database that is developed reflecting any revisions to the socio-economic assumptions resulting from any appeals or revisions should be a separate and distinct database. The pure projections should be utilized in the RTP.
- Ms. Shimoto-Lohr also requested the following revision be made to page 4, paragraph 3. The following change: "However not all counties forecasts for every revenue source are ~~not~~ forecasted through the entire RTP period."

Motion was moved, seconded, and unanimously approved.

3.2 Information Items

3.2.1 SCAG Regional Activities Relevant to RTP Development

There were no comments.

4.0 DISCUSSION ITEMS

4.1 RTP Base Year System Gaps/Deficiencies

Mr. Bill McCullough, System Metrics presented members with a follow-up preliminary needs assessment of the freeway congestion. Tarek Hatata, System Metrics added that the results included in the presentation are in the draft phase and are subject to change. The presentation included AM and PM peak period models as well as feedback received from the P&P TAC. Due to limited time, the presentation was focused on the AM peak period results.

The needs analysis results on segments presented in February's TAC meeting have changed based on the new PM peak period model results from SCAG. A county-by-county approach was used with the intent to identify the most congested corridors within each county (i.e. corridors that combine to account for at least 33% of total county delay for the period). The 1/3 threshold is still open to discussion by TAC.

Freeway segments were aggregated into corridors based on freeway to freeway segments, then modified based on further analysis. Both HICOMP and PeMS data

were also included in the analysis. Bottlenecks identified by PeMS, along with HICOMP data were compared to the model data for correlation, taking into account both speeds and delay.

Visuals of the SCAG 2003 model AM and PM peak period speeds were presented. The PM model showed much greater congestion than the AM model. Speed data was converted into delay by measuring volume and length of the segment. Delay per lane mile was analyzed to distinguish between delays found on long segments with less intensity than those found on shorter segments with higher intensity. Delay per lane mile was then normalized for both AM and PM peak period to provide relativity to congestion intensity levels found in varying environments. The TAC was reminded that the data being presented was still open for discussion and needs technical input from the TAC.

Visuals of congested segments within Los Angeles, Orange, Riverside, San Bernardino and Ventura County were presented. They included maps showing segments in the AM peak periods in green and those in the PM peak periods in red. These maps were followed by data tables for each county. A TAC member asked why the I-10 between the 405 and 110 was not noted as a highly congested segment according to the analysis. Mr. McCullough restated that the segments were selected based on the previously discussed 33% threshold for each county's total delay for the period. The I-10 segment in question did not meet this threshold within Los Angeles County.

Mr. Schuiling, commented on the speed related maps showing that the speeds are very low. Mr. Hatata noted that data from the model differs from field data and that models often have higher volumes than observed in the field. The maps represent model data and if we use "observed" volumes and multiplied it by the delay per vehicle figures, the results would be lower that the model-based figures shown on the maps. Mr. Amatya mentioned that if you were to use fifty percent as the criteria, most likely ten segments would show up. Mr. McCullough suggested that a list could be produced of all segments for the TAC to review. Mr. Schuiling stated that the HOV lane on the WB I-210 always has gridlock in the AM and on the following PM peak period slide, only the EB I-210 is shown.

A request was made regarding the list that will be provided to include the volume times delay hours. Agreement was reached to provide this information upon receipt of the final model. Another comment was made stating that it would be better to combine HOV's and mixed flow because the model is not very good on HOV's and is very difficult to model that correctly. Ongoing studies and contracts will be implemented next year to improve this.

Mr. David Mootchnik (So Ca Commuters Forum) inquired about the reliability of the sources being used for the analysis in light of some of the discrepancies being discussed with respect to speed data. Some discussion ensued regarding the difficulties common to modeling and the ability to represent data with 100% accuracy. Various efforts are ongoing in the modeling community to address the issues with speed data. Mr. Hatata commented that the more manageable goal in terms of needs analysis is to identify the major problem areas especially with such a large area as the SCAG region. Mr. Amatya emphasized that this is a work in progress and that analysis results may change as existing projects are included in the future.

Mr. Mootchnik stated that it is very important to have results grounded by as much raw data as possible. Mr. McCullough then spoke briefly about the issues with HICOMP as raw data is converted to congestion and delay measurements. He then elaborated on the process by which the HICOMP data is integrated with modeling results in order to identify the major congested corridors. A visual analysis of Caltrans generated maps showing congestion on the freeways was overlaid with the HICOMP data to provide an indication of major congested corridors. An analysis of these corridors using HICOMP delay data and the model was also performed.

Mr. McCullough displayed slides on congestion for each county. For the most part, the PM segments remained the same. The 405 and the 101 were identified as the most congested quarters by the model. PeMS also shows severe bottlenecks for these areas. Ms. Shiomoto-Lohr commented that in Los Angeles County, the WB I-210 in the AM period from the 605 to Lake Street from 8am to at least 10:30am is a standing parking lot. In the PM peak period EB on Lake or Rosemead to the 605 is also a sitting parking lot. She inquired as to why this segment was not identified for LA County. Mr. Hatata stated that it did not meet the 33% factor.

Ms. Shiomoto-Lohr asked if staff intends to provide more detailed (e.g. ADT's, speeds, etc.) lists as we move forward. Mr. McCullough confirmed that more detailed lists will be forthcoming.

A TAC member inquired about whether or not a regional approach was pursued in the analysis work. They commented that SCAG is a regional agency and this is a regional document and therefore congestion should be assessed regionally. Mr. Dana Gabbard commented that Caltrans' portion of the State Transportation Improvement Program (STIP) funding is designated for regional needs and that the respective counties should be partnering to address these needs. Mr. Schuiling noted that Caltrans' portion of STIP funding is only 25% and intra-regional agencies (MTA, OCTA, SANBAG, RCTC, etc.) control a 75% share.

Mr. Schuiling noted that the TAC was currently discussing existing conditions but that future conditions will also need to be addressed at some point and are just as significant. He added that the TAC has yet to be presented information on how to solve the identified problems and that the financial burdens appear to be daunting. Mr. Gabbard asked if staff would be able to provide an actual scenario related to projected demand and ultimately what would be needed in terms of a facility improvement. Mr. Schuiling commented that maximizing operational efficiency would be an effective approach especially in more urbanized areas where you are more likely to succeed by providing alternatives, building parallel or improving parallel facilities. Often you will not focus your investment specifically on the corridor in question.

Mr. McCullough continued by addressing individual county segments that met the 33% threshold beginning with Los Angeles County. All but one of the Orange County segments remained unchanged as reported at the February 15th meeting. The I-5 SB to Alicia Parkway was no longer on the list perhaps due to modifications of the model. The 405, the 91, and the 57 were the big three for both time periods. Riverside and San Bernardino County congested areas pretty much stayed the same. There were a few changes in San Bernardino County based on the model results. The NB 15 towards Hesperia became much more congested in this model than in the last one. The 215

dropped out south of the 10. Mr. Schuiling noted that the 10 between the 15 and 215 experiences the worst delay in the entire county right now and also where there is a monitoring problem. Mr. Schuiling added that the NB 15 in the PM over the Cajon Pass is also bad with two freeways merging into one and very high truck volumes.

Mr. Van Haagen asked if a comparison was made between the new model results and the 2000 validation as there tends to be valuable information to be gained typically. Mr. Hatata stated that a comparison had not been made yet. Mr. Schuiling questioned the data regarding the 214 segment between the 10 and 60 crossing the San Bernardino/Riverside county line. He stated that the heaviest congestion occurs on the NB segment in the PM and not the SB segment.

Mr. McCullough stated that PeMS data shows a bottleneck at Getty on the SB 405 in the PM. The SB 101 in both AM and PM at various locations was also identified by PeMS as showing heavy congestion. PeMS shows greatest bottlenecks at the 101 and the 405. In Orange County you see a repeat of the most congested based on model and HICOMP from the 55 to the 91. The 405 is also a repeat of the AM peak period results. In Riverside County the SR-91 was extended to McKinley and is measured every year by District 8. This is the only corridor that connects Riverside County to Orange County making it one of the most congested. One of the most congested corridors in San Bernardino County is shown on the I-10 from Los Angeles County to the I-15. A new segment that appeared is the 10 east of the 30 in the AM peak period which may be do to an ongoing construction project. The model corresponds very well with what HICOMP recorded this year. Another new segment is the section of the I-15 NB from the I-15/215 to Hesperia. There is no HICOMP data nor was PeMS monitoring on this segment therefore this segment is not validated. Mr. Schuiling stated that this (NB I-15) is an easterly analog of SR-14 and there are 300,000 plus people living north of this area and about half of the labor force has work in that area. He noted that this is a corridor that is recommended for the dedicated truck lane system in the SCAG RTP. Mr. McCullough stated that HICOMP picks up delay south of the 15 and the 215 but congestion seems to be at the Cajon pass. Mr. Schuiling commented that the big interchange at Devore where the 215 and 15 converge has to be completely reconstructed. The straight through move is off of the 215 and the 15 from Ontario goes from 4 lanes to 3 lanes to 2 lanes and ultimately enters the freeway north of the interchange in the right lanes. Mr. Schuiling added that Caltrans just did a shot project to add a short auxiliary lane on the inside. Mr. McCullough stated that in San Bernardino County, the I-15 SB from 1-10 to the Riverside County line no longer was included the 33% threshold group as was reported at the February TAC meeting.

Mr. McCullough continued with Ventura County, stating that the SR-118 from Simi Valley to Los Angeles County accounts for all of the delay shown in the model and that the congestion disappears once it crosses into LA County per PeMS data.

A TAC member asked why the 710 was not identified as a congested segment despite the heavy volume of truck traffic along the corridor. Mr. Van Haagen noted that trucks can be counted in the analysis as 2 or 3 vehicles and should include PCE factors to increase accuracy. Mr. Hatata replied by stating that a more effective way to measure for truck delay would be to derive the impact to speeds and then calculate the delay per vehicle and multiply that by total number of vehicles where you count the truck as 1 not 3. He added that a truck would impact the speed but the total delay based on the speed

calculated should not double or triple the delay for the truck. Therefore, the speed would be lower and delay would be higher for the segment.

Mr. Mootchnik asked if relying more on monitoring data as opposed to the model would help address issues with certain known congested segments not showing. Mr. Hatata replied that future plans would require in use of the model. Some discussion followed with issues to calibrating the model and resolving its discrepancies with monitoring data. Mr. Hatata suggested that a separate TAC meeting in the future focused on modeling issues with modeling staff present may be an option.

Mr. Miles Mitchell expressed his reservations with regard to using a 33% formula in the needs assessment as it may not represent LA County's needs accurately relative to the other counties. Mr. Mitchell suggested agendizing for the next TAC meeting a discussion on funding allocation methodology and how actions taken by the TAC may impact funding determinations. Mr. Hatata pointed out that a key difference between the 2004 RTP and the current plan update is that this time around, there is an attempt to evaluate the projects that we have in terms of how they address identified needs. He reiterated that not all congested segments may be addressed but that maybe a function of project costs and limited funding. Mr. Hatata noted that the RTP should demonstrate that the needs will be met and that currently, there is no reason to believe that the county projects are not addressing these needs. He continued by commenting that policy decisions with regard to alternatives may need to be addressed later in the process ultimately by the Regional Council. Mr. Hatata noted the region's current issues with meeting air quality attainment would be a prime example as an impetus for driving potential policy alternatives. Mr. Schuiling inquired on whether or not the RTP will be developed in line with specific performance objectives and that this should be agendized for a later TAC meeting. Mr. Hatata stated that specific performance objectives were not in place in developing the 2004 RTP and that general policy objectives served as a starting point. However, with the inclusion of truck lanes and Maglev, later modeling results that showed delay per capita to stay the same were included in the 2004 RTP as plan benefits. Mr. Schuiling commented that the absence of performance objectives makes it very difficult to state a case that our resources are insufficient to finance the transportation system that we need. He suggested that the RTP would not prove to be a successful plan if it turns out that when we put all of the strategies together and the net effect is still a 25% increase in per capita delay by 2030. Mr. Schuiling stated that it would be important to have the performance objectives as it would serve to guide the planning work early on in the process. Mr. Hatata suggested that perhaps an hour should be agendized for the next meeting to further discuss these issues. Mr. Schuiling stated that if we were to establish a technical objective among staff, the TAC would be in a better position to make recommendations to the policy committees and it would be their decision at that point.

The TAC was informed that all comments should be directed to Naresh.

4.2 Compass 2%/RTP Integration

Frank Wen, SCAG, presented on both the Compass 2% - RTP Integration and Growth Forecast items on the meeting agenda. Mr. Wen briefly updated the TAC on staff's

efforts with the RHNA process. The RHNA draft was released for public comments on February 1st.

Mr. Wen then discussed staff's current efforts with respect to developing a long-term data set for the RTP's planning purposes. Mr. Wen reported that staff has met with several agencies such as MTA and the City of Los Angeles for input as to how their growth allocation distributions around primary corridors have evolved since the 2004 RTP. Mr. Wen stated that through the Integrated Growth Forecast/RHNA workshops, the staff consultant was able to develop a 2035 growth visioning test scenario. This test scenario is based on the adoption of the 2004 RTP growth vision and distribution as well as the implementation of the Compass 2% demonstration projects. In addition, staff has currently received small area allocations from Riverside County and the growth forecast on the SMO level from Orange County.

Mr. Wen stated that staff will be ready to present to the TAC a land use test scenario at the conclusion of the RHNA appeals process and once all the local input has been processed. Staff along with the consultants will lay out the test scenarios based on the 2004 growth visioning principles which will lead into additional scenarios specific to preferred development types and land use distributions along transportation corridors and integrated with committed RTP projects and plan alternatives. Mr. Wen stated that staff anticipates the conclusion of the RHNA appeals process toward the end of April and an updated data set may be available to present to the TAC in early to mid May for discussion of the RTP no project Baseline.

Ms. Shiomoto-Lohr asked that when the RHNA appeals revisions trades and transfers processes are completed, and if there are successful appeals those housing units would then be distributed to the remaining jurisdictions in the SCAG region that have not accepted sub-regional delegation, if staff intended to adjust the distribution numbers back into a small area geography and assign those units and use that as part of the policy forecast. Mr. Wen stated that the data that staff released at the workshops up to 2014 does reflect the technical trend of the growth forecast. He added that results of the growth visioning process are not used to assign additional growth to jurisdictions. Mr. Wen commented that staff is hopeful that the technical level growth forecast will not be significantly impacted by the appeals process to the extent that it will warrant redistributions with significant impacts at the regional level.

Mr. Shiomoto-Lohr asked if staff anticipates having a 2014 run from the model. Mr. Wen said yes but not because of RHNA but because there are some discrepancies between the number of households provided to AQMD and what was released for RHNA.

A TAC member requested further discussion of the how the RTP will integrate with the 2% strategy and subsequent growth scenarios. Mr. Amatya stated that the requested discussion may take place in 2 to 3 months at the completion of the needs assessment process.

4.3 Transportation Finance

Ms. Annie Nam, SCAG, provided members with a brief update of the revenue model based on updated data has been provided by MTA and SANBAG. Ms. Nam reported

that the Transportation Corridor Agency (TCA) is in the process of updating its forecast and will be providing information shortly. Fuel sales tax and bridge rehab funding numbers have also been included into the financial model. Any questions or comments can be addressed to Tarek Hatata. The development fee for Los Angeles County is not being included and is simply a study at this point. This may be included as part of the alternative funding strategy. Ms. Lori Huddleston (MTA) noticed that in 1996 there was about $66 million in mitigation fees in Los Angeles County and asked if staff knew what that was for. Ms. Nam stated that it may have been for the Red Line Benefit Assessment District but would need to verify that information.

Ms. Nam continued with regard to the forecast model. The total preliminary forecast is $212 billion in transportation revenues for the SCAG region and is from 2006 – 2036 in 2005 dollars. The differences are accounted for by the number of years. The preliminary forecast covers 31 years. A revenue drop was not included from alternative fuel fleet penetration. Sales tax extension measures have also been added along with additional state funds.

There was some discussion on whether or not gasoline tax revenues should be assumed to serve as a strong revenue source in the revenue model. Ms. Nam stated that a growth rate or increase is not assumed in the model and that the topic deserves further discussion.

Ms. Nam continued by stating that in the previous forecast, only a portion of the gas tax subvention dollars were used recognizing that not all of those dollars are spent on regionally significant roadways. This time we took the total subvention figures from the state controller's reports. Mr. Schuiling commented that very little of the local gas tax subvention is spent on regionally significant facilities and that this assumption also deserves further discussion. Mr. Schuiling also inquired on what the "other federal" category represented. Ms. Nam replied that there were various discretionary categories that could not be captured and were included in this category. Further details can be provided at a later time.

Ms. Nam reminded the TAC that this model is still in the preliminary phases and has not yet taken into account carry over balances. Staff is still comparing assumptions with CTC staff. Mitigation forecasts also need to be further refined.

Ms. Carla Walecka asked if all of the public revenues and all of the private initiatives will be presented in more detail. Ms. Nam replied that what was being presented are public revenues although toll road revenues generated by the TCA are included in this baseline forecast. She added that staff is also working on business plans for some of the private initiatives that were in the previous plan (2004 RTP) and will be presented to TAC at a later time.

Ms. Huddleston asked what farebox ratio was assumed for the MTA. Ms. Nam stated that figures from MTA's long range plan have been incorporated in the model and that she is also cognizant of pending policy changes from the MTA board.

Ms. Shiomoto-Lohr inquired about the tax apportionment to counties and constituent cities with respect to Prop 42 funds and how it will be included in the revenue forecast for the RTP. Ms. Nam replied that there is a subvention component for Prop 42 funds that is reflected in the finance model. Ms. Shiomoto-Lohr requested that the model

assumptions being discussed be revisited because the cities are using all of this to deal with resurfacing and local projects.

Mr. Mootchnik asked if staff was aware of what fraction of federal gasoline tax generated by the SCAG region comes back to the region and if anything is being done to affect the shortfall that we see in this area? Ms. Nam replied that SCAG has always argued that we are not getting the region's fair share. With SAFETEA-LU there were some provisions to step up the return. This will need to be addressed in the forecast.

Ms. Walecka asked if the assumption was that the region will continue to receive about 92%. Ms. Nam replied that the assumption is we will continue to receive what we are currently receiving.

4.4 Transportation System Preservation

Mr. Tarek Hatata presented members with the system preservation guiding principles. Mr. Hatata noted that SAFETEA-LU has an area for MPO planning where the planning process must emphasize the preservation of the existing system. Mr. Hatata presented the State Highway Operations and Planning Program (SHOPP) chart which illustrates pavement conditions vs. cost of repair.

Mr. Hatata stated that reliable studies are being sought to assess preservation needs. He urged discussion from the TAC on what can be done to affect state level funding decisions referring to SHOPP and STIP. Mr. Schuiling commented that due to increasing constraints on federal funding, funds for preservation efforts that used to fall into the STIP per SB2045 are no longer available. Mr. Hatata stated that the TAC should discuss an approach to provide to our policy makers if the federal funds are not enough and the state funds go directly to STIP without getting to SHOPP. Discussion continued regarding decreasing resources to meet preservation needs and the TAC's role in developing policy strategies. No specific preferred action or strategy was agreed upon by the committee at this point.

Mr. Hatata reported that requests have been made to the counties to try and collect as much data as possible related to pavement quality on local roads and arterials. Ms. Shiomoto-Lohr inquired about what the cost increase for pavement repairs has been since the 2004 RTP. She also agreed to provide staff with data on arterials.

4.5 Standing Items

4.5.1 Growth Forecast

This item was presented by Frank Wen, SCAG, during Item 4.2.

4.5.2 Highways and Arterials

4.5.2.1 CMIA Program Update

Mr. Naresh Amatya, SCAG, reported on the CTC adopted CMIA program. Mr. Amatya stated that there are a number of projects that are inconsistent with the existing RTP because they are either not in the current plan (2004 RTP), or they are scoped or scheduled differently, or have cost changes, etc. SCAG is attempting to amend the existing RTP to

reflect these changes. He added that staff is currently working to amend the plan by the July 1, 2007 deadline (statutory for SAFETEA-LU).

Mr. Mitchell asked about the schedule/timeline for the RTP update work and requested that it be distributed to the TAC when available. He commented that it would be important for the TAC to be aware of these dates and be cognizant of the process that lies ahead, especially in terms of milestones and key decision points. Mr. Amatya replied that staff intends to have the draft RTP completed by end of October. Mr. Amatya stated that staff will distribute more information on this topic before the next meeting.

4.5.3 Non-Motorized / TDM

There was nothing to report.

5.0 STAFF REPORT

Mr. Naresh Amatya, SCAG, briefed TAC on the RTP Workshop held at SCAG on March 1, 2007 on Transportation Finance. He reported that the workshop was a great success that the next workshop was scheduled for April 5, 2007 to discuss air quality issues. Mr. Amatya encouraged the TAC to participate and stated that the next meeting in April may need to be rescheduled due to the MPO Inter Modal planning meeting with the FHWA/FTA.

6.0 ADJOURNMENT

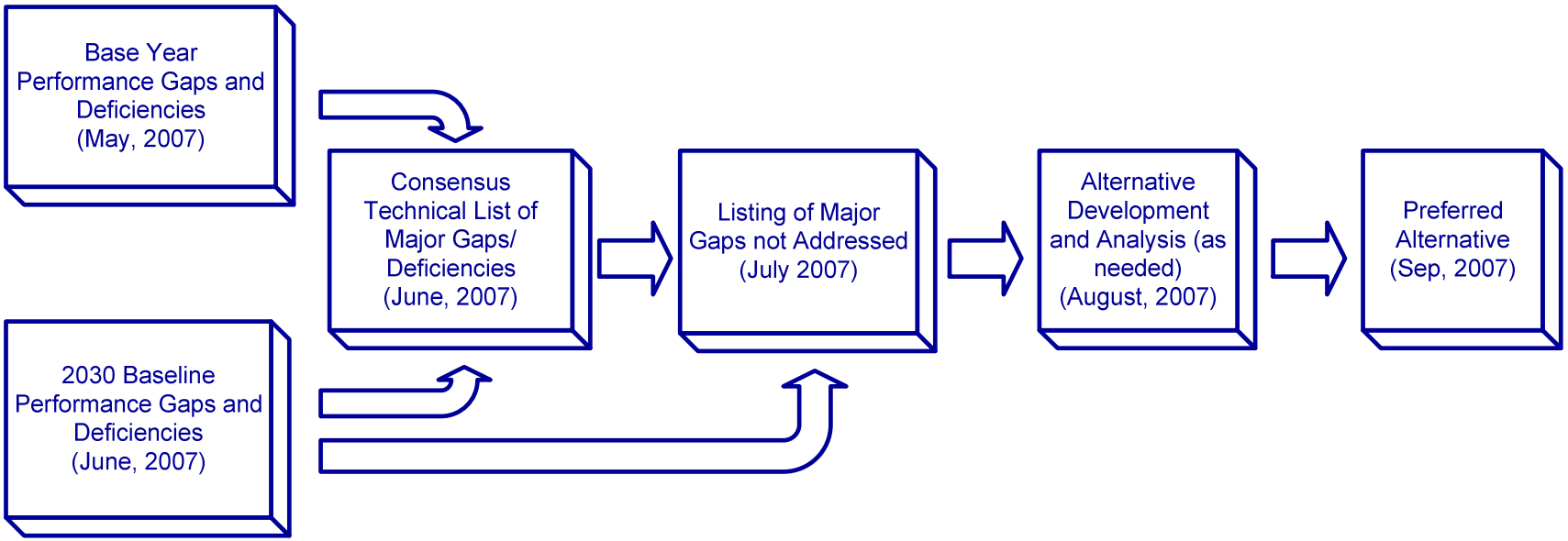
Chair Ty Schuiling, adjourned the meeting at 12:20 pm. The next meeting of the Plans & Programs Technical Advisory Committee was tentatively scheduled to be held at SCAG's Los Angeles office on April 19, 2007.

Southern California Association of Governments

Needs Assessment Framework & Major Related Milestones

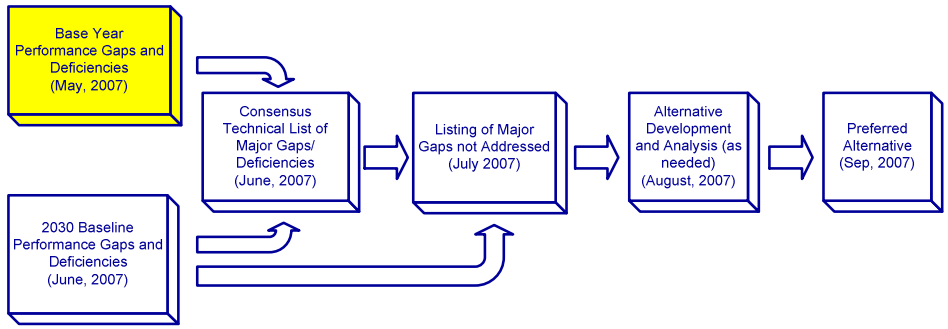
System Metrics Group, Inc.

Major efforts required to develop the 2007/2008 RTP



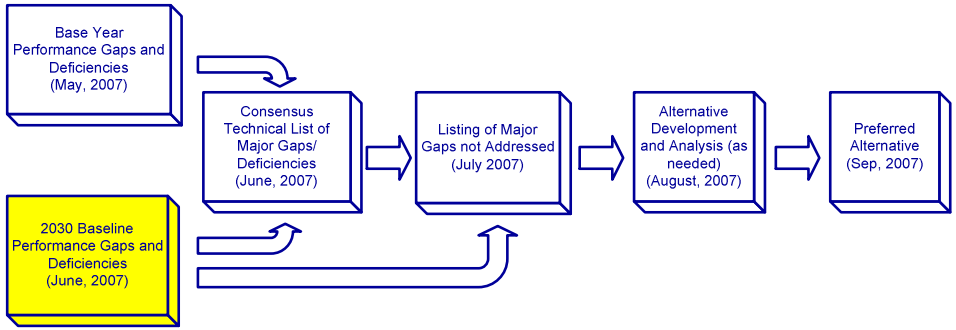
We have started working on the base year analysis to identify performance gaps and deficiencies

- Freeways (AM and PM) .. May, 2007
- Arterials … May, 2007
- Freight and Goods Movement … May, 2007
- Transit … June, 2007
- Aviation … June, 2007



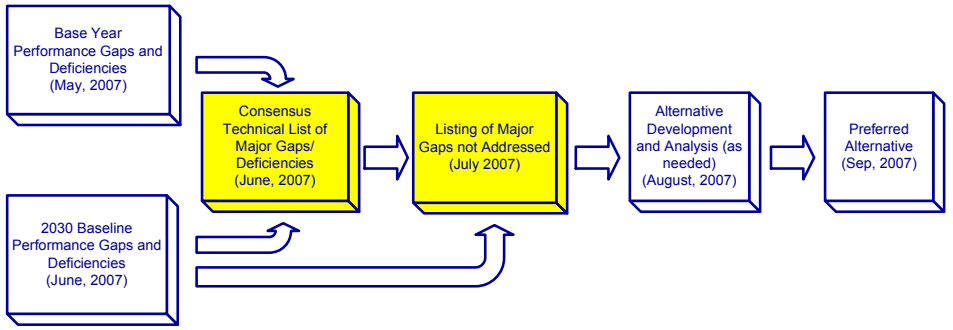
We will also identify the future "baseline" performance gaps and deficiencies for 2030

- Freeways (AM and PM) … June, 2007
- Arterials … June, 2007
- We will also show you how baseline projects impacted the base year gaps/deficiencies



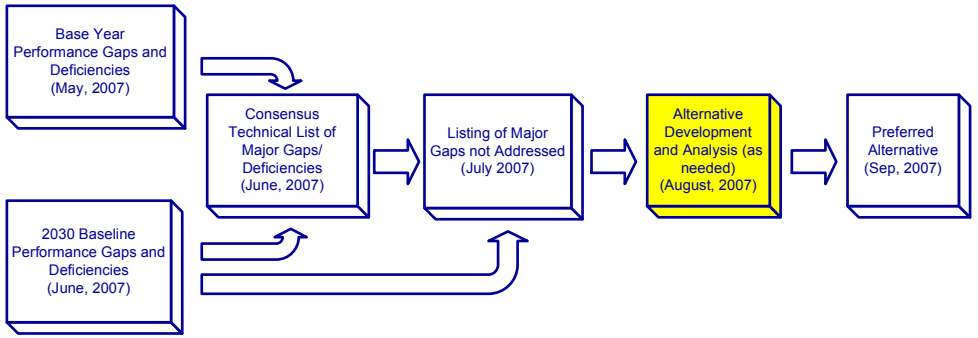
So by June, we should have an consensus list of major performance gaps and deficiencies and which ones were not addressed by the baseline investments

- We can then analyze to what extent our major performance gaps and deficiencies have been addressed
- We will also review the air quality analysis results and the degree to which attainment has or has not been achieved

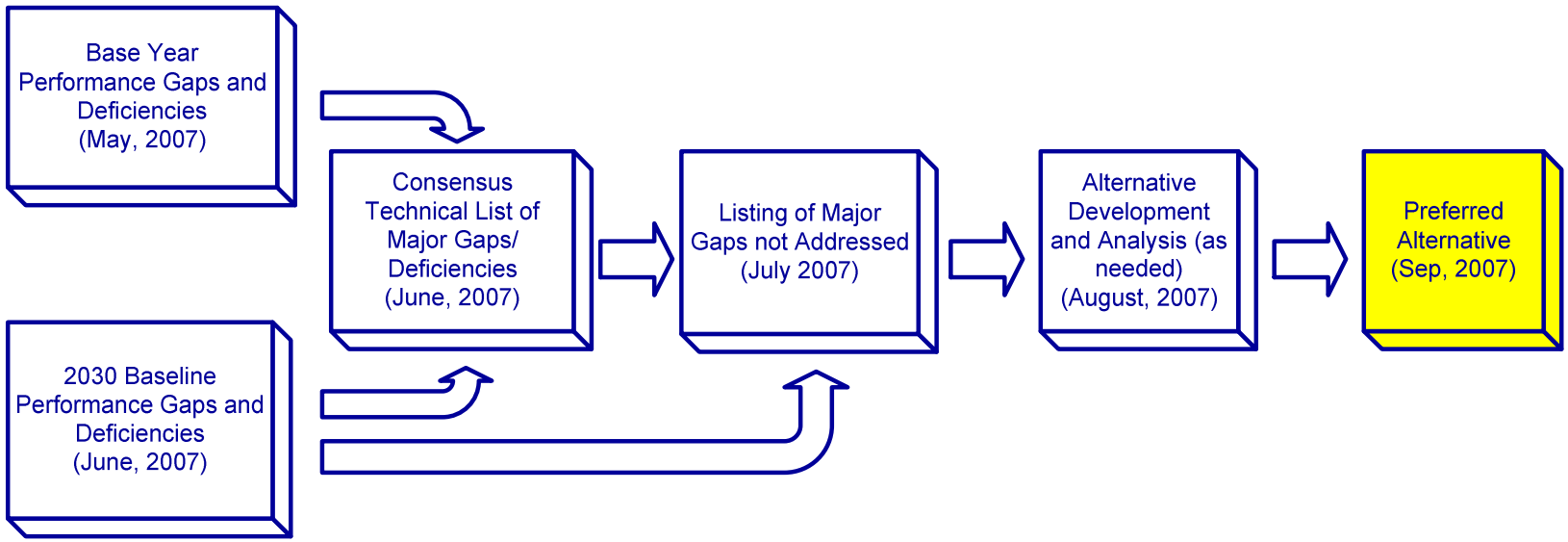


We will then cooperatively develop alternative scenarios, evaluate them and compare them to the baseline results

- Based on the above, we will consider alternatives for evaluation. This would include:
  - Projects that can be implemented through innovative financing
  - Policy scenarios with growth visioning
  - Changes in baseline projects deemed to potentially improve performance
  - Other (developed with input from the TAC)



… and finally develop consensus on the preferred alternative and get the Regional Council approval by August



- Once we receive approval, we can develop the draft RTP by October

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

RTP Update

Goods Movement

Existing Conditions

www.scag.ca.gov

Goods Movement in the SCAG Region

- **Major Gateway for International Commerce**
  Ports of Long Beach and Los Angeles account for 87 percent of State's container volume
- **Tremendous Freight Infrastructure Development**
  Ports, airports, border crossings, highways, rail and intermodal terminals
- **Major Role of Freight/Logistics in National, State and Regional Economies**
  One out of every seven jobs in Southern California depends on trade
- **Existing Infrastructure is Reaching Capacity**
  System is already straining to keep pace with current demand
- **All Projections Point to Continued Robust Growth in Goods Movement Volumes**
  Container goods movement alone expected to increase from combined 5 million TEU in 2000 to almost 20 million TEU in 2020
- **Associated Increase in Demand on Transportation System**
  Truck VMT expected to increase 110% by 2030
- **Growing Concern Regarding Side Effects of Goods Movement**
  Issues of community health, air pollution and congestion are foremost

SCAG Studies Completed

- **SR-60 Truck Lane Feasibility Study**
  Concluded that dedicated truck lanes between I-710 and I-15 were feasible
- **Goods Movement White Paper**
  Survey of regional initiatives & discussed program objectives
- **Truck Count Study**
  Conducted 24-hour, observed counts at over 150 highway locations throughout the region
- **LA-Inland Empire Railroad Mainline Advance Planning Study**
  Forecasted year 2025 Rail Capacity Needs
- Empty Container Study
  5-10% of empty containers can be reloaded for export

Studies Completed (Continued)

- Logistics and Distribution: An Answer to Regional Upward Social Mobility
  - Logistics industry accounts for 1 in 7 (550,000) jobs in the region
  - Replaces lost manufacturing jobs and at a higher pay level

- Port and Modal Elasticity Study
  - Measured impact of user fees on cargo volumes at the LA/LB Ports
  - Concluded that container charges RESULTING IN CONGESTION RELIEF would reduce volume by only 4.3%

Studies Underway

- Multi-County and State Goods Movement Action Plans
  Regionwide & Statewide strategies and solution sets
- Inland Port Feasibility Study
  Feasibility of shifting the storage & sorting of containers inland
- Port & Modal Elasticity Study Phase II
  Measuring freight diversion in the short run
- Env. Mitigation for Goods Movement
  Most cost-effective air quality mitigation strategies
- Alternative Technologies
  Feasibility of alternative cargo conveyance systems

Input Alternatives for 2008 RTP

- State GMAP
- Multi-County GMAP
- 2010 AQMP
- POLA/POLB Master Plans
- BNSF/UP Capital Plans
- Additional inputs:
  - Infrastructure Enhancements
  - Environmental Mitigations
  - Institutional/Legal/Financial
  - Alternative Freight Transport Tech

Entry of Goods in Region

- Ocean Carriers
  - Inland-point Intermodal Service
  - Transportation to the Port Gate with a Container Mounted on a Chassis
  - Transportation to Inland Warehouses
- Air Cargo
- Railroads
- Trucking

Ports
Los Angeles and Long Beach

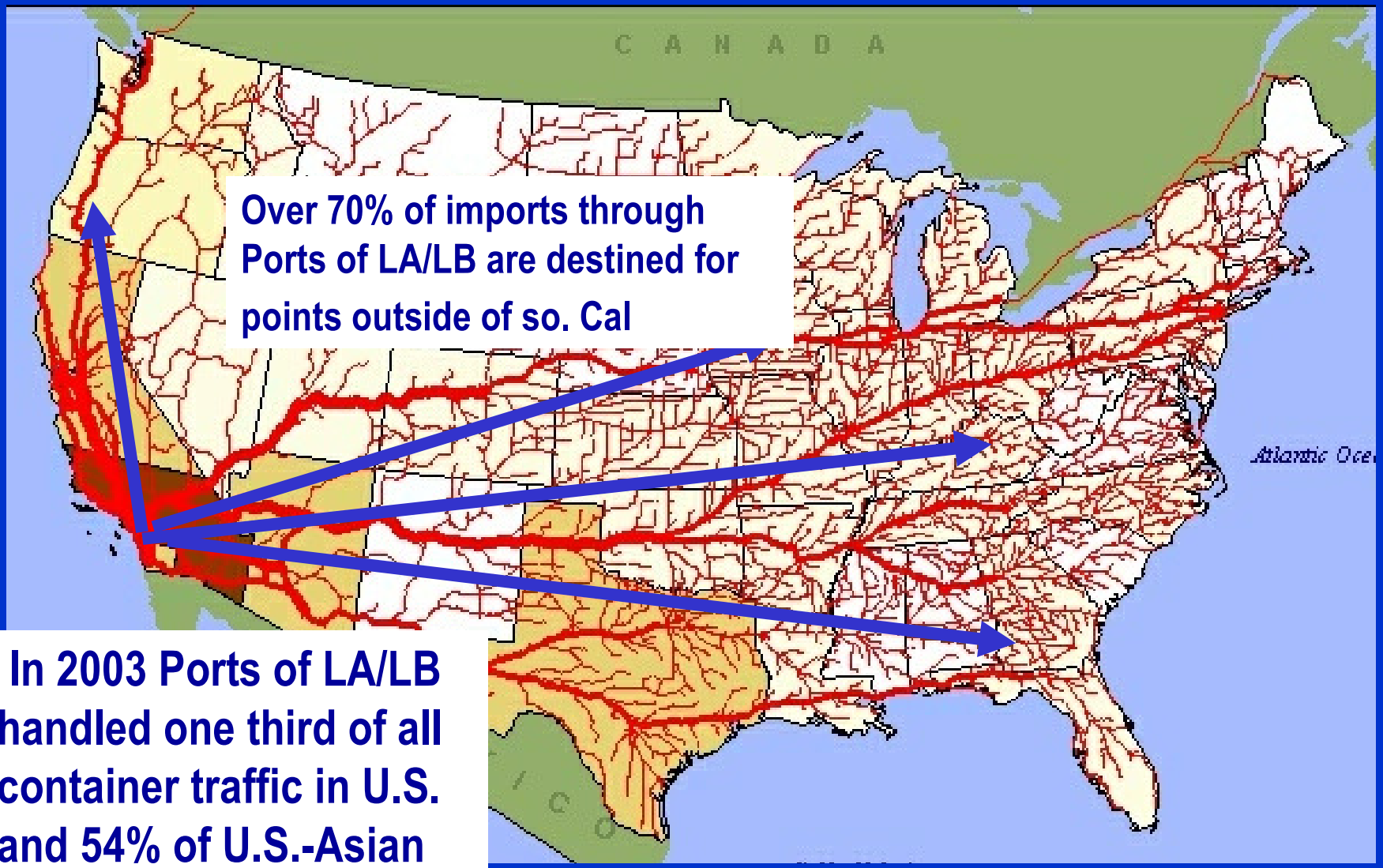
- Largest National Container Port Complex
- Fifth Largest Container Port Complex in World
- 15.7 million Twenty-Foot Equivalent Units (TEUs) of containers in 2006
- Approximately 40,000 TEUs units move every day through the ports

Ports
Los Angeles and Long Beach

- Fourth largest Nationwide in tonnage of bulk and break-bulk commodities (including automobiles and liquid bulk)
  - Total of 135 million tons in 2005
- The ports handled a total of close to 352 million metric revenue tons of cargo in 2006 (including containers)

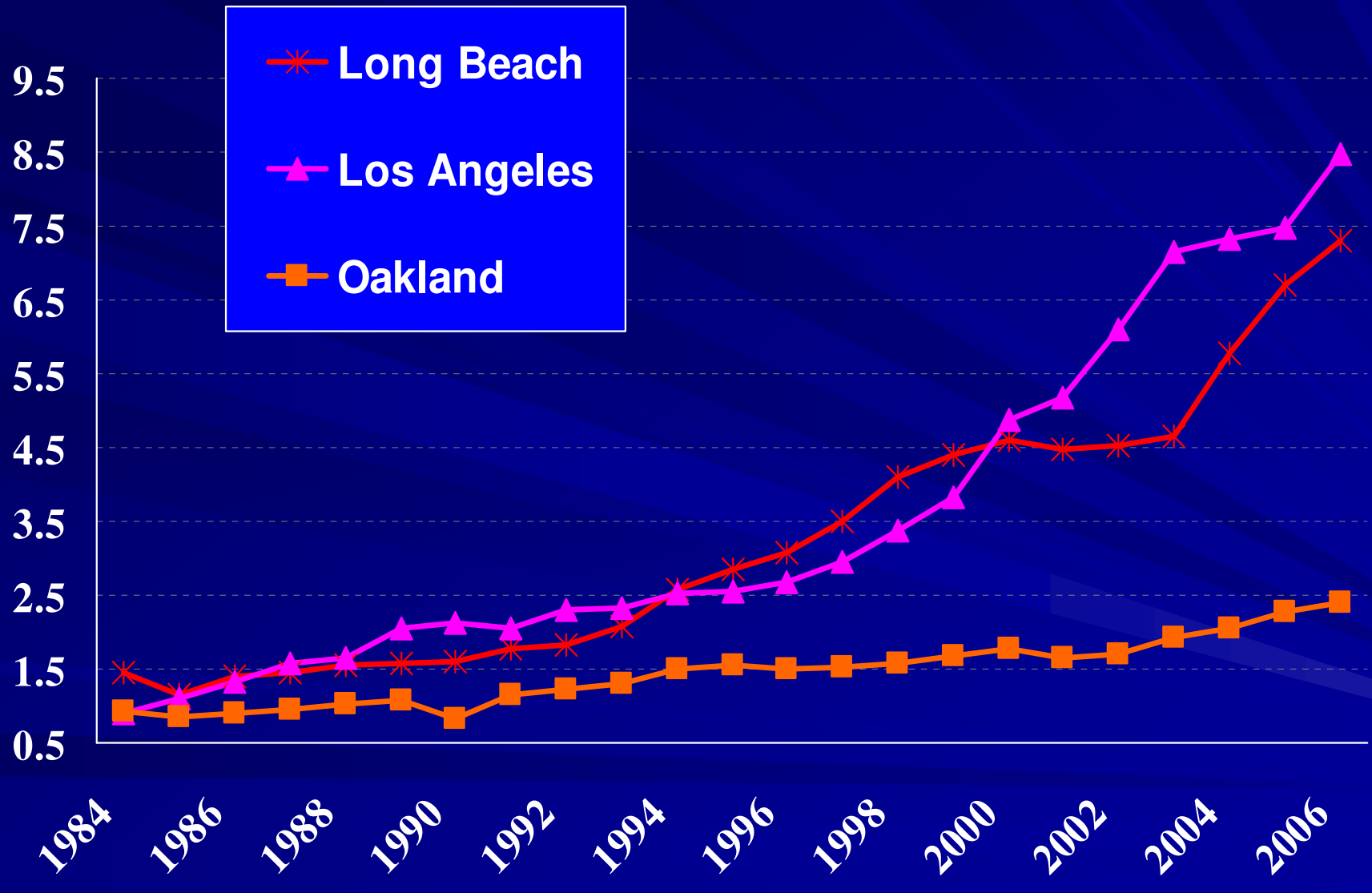
Cargo Type	2006 Cargo Volume (Millions of Metric Revenue Tons)		
	Port of Los Angeles	Port of Long Beach	Total (Both Ports)
General Cargo (Including Containers)	155.3	127.2	282.5
Liquid Bulk	22.8	33.2	56.0
Dry Bulk	3.6	9.4	13.0
Total	181.7	169.8	351.5

Sources: Port of Los Angeles 2006 Financial Statement; and Port of Long Beach 2006 Monthly Tonnage Summary Reports.



In 2003 Ports of LA/LB handled one third of all container traffic in U.S. and 54% of U.S.-Asian containerized trade

Container Traffic at California Ports 1984-2006 (Millions of TEUs)



Waterfront Coalition White Paper, May 2005

"Regardless of efforts to develop alternative West Coast gateways, Los Angeles and Long Beach will remain the primary entry points for eastbound imports into the U.S."

Trade and Trade Growth Issues/Impacts

- Impacts
  - Growing congestion: 110% more trucks on roads by 2030
  - Air quality concerns: DPM and NOx growth
  - Health concerns: Increasing rates of cancer, asthma
- Positive Contributions
  - Jobs: 1.4 million people employed in 2005
  - Regional, state, and national economic engine: Created $113 billion in economic value in 2005
- Issues
  - Terminal capacity expansion needs
  - On-dock rail needed
  - Port contribution to regional transportation system

Recent Actions to Combat Impacts/Issues

- PierPass OffPeak project
- San Pedro Bay Ports Clean Air Action Plan (CAAP)
- Alameda Corridor
- Gateway Cities Truck Replacement Initiative
- On-Dock rail increase to 20%
- Development and test deployment of Virtual Container Yard
- Study of advanced, low-emissions container transportation technologies

On- and Off-Port Infrastructure Improvements: $20.2 billion in Needed Projects

- San Pedro Bay Ports Area
- Port of Oakland Area
- California's Smaller Ports

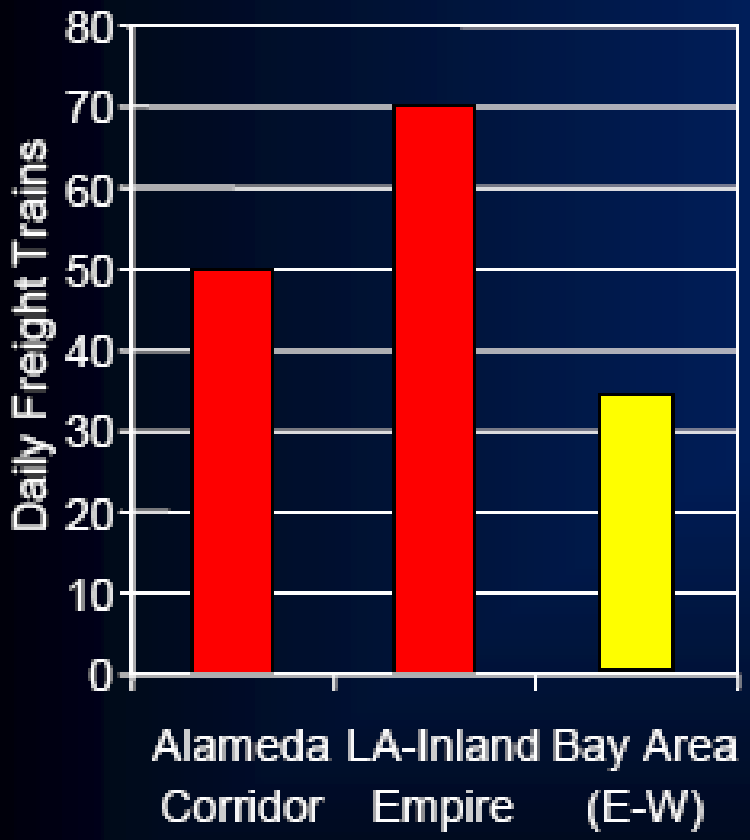
RAIL

- Carload and Intermodal Volume uses eight UP/BNSF Terminals
  - 64% Intermodal
  - 36% Domestic (carload)
- Nation's #1 Rail Intermodal Operation
  - 5 million containers annually
  - Projected to double by 2025
- Carload traffic
  - Represents about one-third of the rail goods movement in the study area= 88 trains/ day or 32,000/year

West Coast National Freight Gateway

Freight Rail

Daily Train Volumes (2004)



- Extensive system -- BNSF and UP
  - 5 million intermodal lifts annually
  - 64% are international containers
  - Largest single intermodal op. in US
- Strategic role – int'l container cargo
  - 52% of international container trade (40% direct and 12% transloaded)
- Key role in reducing truck traffic
  - 20% transferred on-dock
  - Congestion, emissions, safety
- System also transports commuters

BNSF - Burlington Northern Santa Fe Railway
UP - Union Pacific Railroad

Train Delays on Existing Trackage

Year	Train Type	Average Delay per Train
2000	BNSF Freight	31.9 minutes
	UP Freight	30.4 minutes

Forecast Train Delay

(Year 2000 passenger trains and no system capacity improvements)

Year	Train Type	Average Delay per Train
2010	BNSF Freight	206.3 minutes
	UP Freight	196.9 minutes

Source: Leachman and Associates Mainline Rail Study for SCAG

Mainline Rail Capacity Issues

- Mainline capacity east of Los Angeles is constrained
  - Historical growth in eastbound container traffic
- Capacity constraints create ripple effect
  - System train speeds deteriorate
  - Cause backups at ports and intermodal yards
  - Disrupt commuter service

Terminal Capacity Issues

- Hobart Yard is at Capacity, BNSF needs new yard to support growth
- On-dock intermodal terminal needs
- Near-dock intermodal terminal needs

Highway Congestion and Delay

- Significant impact on goods movement
  - 18% of trucks are delayed on average weekday
  - Increases cost of transporting goods 50% to 250%
- Connects GM facilities with businesses
  - Typically open during daytime
- Bulk of truck traffic is off-peak
  - Two thirds does not occur during AM and PM peak
  - AM and PM peak truck traffic almost as much as night

Truck Volume on Southern California Freeways

In thousands

Freeway	2002	2025
I - 110	18.6	39.1
I - 405	22.3	42.6
I - 10	20.4	43.3
U.S. 101	20.7	43.4
I - 105	26.1	54.9
I - 5	40.9	85.9
I - 710	47.3	99.3
CA - 60	50.4	105.8

110% Average Increase

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

Truck Counts by Type Across SCAG Region

Screenline	County	Freeways	Description of Travel	Total Daily Trucks
1	Los Angeles	I-5, SR-2, U.S. 101, I-405	North – South	54,991
2	Los Angeles	I-10, SR-60, I-5, I-105, SR-91, I-405	East – West	144,883
3	Los Angeles	I-110, I-710, I-405	North – South	66,515
4	Orange	SR-57, SR-91, I-5, SR-22, I-405	Out of OC/Into OC	90,899
5	Orange	I-5, SR-57, SR-91, I-405	Out of S. LAC/Into S. LAC	91,934
6	San Bernardino	SR-91, I-10, SR-60	East – West	85,143
7	San Bernardino	I-215, I-15	North – South	57,680
8	Los Angeles	I-210, I-10, SR-60	East – West	80,167
9	Riverside/San Bern.	SR-60, SR-30, I-10, SR-74	East – West	25,058
10	Ventura	SR-118, U.S. 101, SR-126	East – West	20,617
11	Ventura	U.S. 101, SR-126, SR-118	East – West	17,220
12	Riverside	I-10, SR-111	Out of Imp. Co./Into Imp. Co.	14,647
13	San Bernardino	I-15, SR-138, SR-18	Out of SB Co./Into SB Co.	2,664
15	Riverside	I-15, SR-91, I-215	North – South	24,975

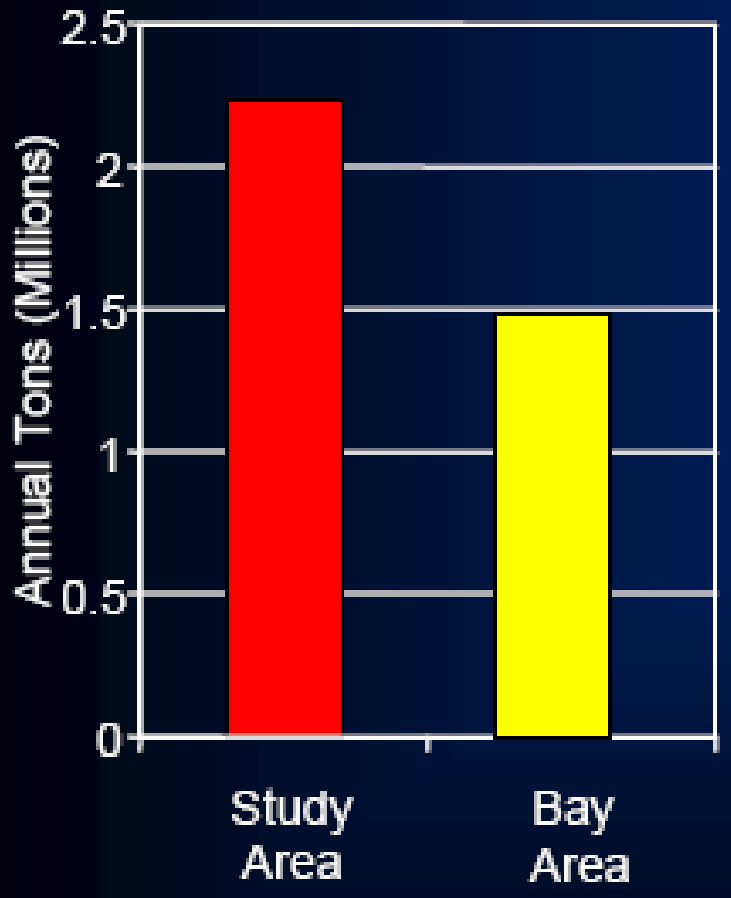
Source: SCAG Goods Movement Truck County Study, 2002.

2003 Daily Truck and Total Vehicle Miles of Travel by District and County

	District	Light-Heavy Trucks 2-Axle	Medium-Heavy Trucks 3 and 4 Axles	Heavy-Heavy Trucks Multi-Axle	Total
Los Angeles	7	2,564,937	998,559	3,433,882	6,997,378
Orange County	12	912,249	289,696	664,822	1,866,767
Riverside	8	1,167,186	389,918	2,202,485	3,759,589
San Bernardino	8	1,343,422	426,252	3,270,318	5,039,992
Ventura	7	270,384	105,797	193,433	569,614

Source: Truck Miles of Travel: California State Highway System 1988-2003, Caltrans, 2005.

Air Cargo



- High value goods and perishables
- Important international gateway
- 2.2 million tons in 2003
  - LAX and ONT handled 95%
- Development of cargo-only airports
  - San Bernardino and Riverside Counties

Air Cargo Activity 2003-2005
SCAG Region Airports
Tons of Air Cargo

Airport	2003	2004	2005	2005 Market Share
Los Angeles (LAX)	2,022,076	2,115,314	2,137,188	75.2%
Ontario (ONT)	571,992	605,211	575,369	20.2%
Long Beach (LGB)	56,081	57,050	54,298	1.9%
Bob Hope (BUR)	47,634	49,633	52,867	1.9%
John Wayne (SNA)	15,816	20,796	24,103	0.8%
Total	2,713,599	2,848,004	2,843,825	100.0%

Source: SCAG Region Aviation Activity Report, 2003-2005.

Economic Imperative: Improving Job Opportunities

- High wages for California workers ($45K per year average)
- Trade jobs – one of every seven in California
- California Trade – 40% of the national total
- 2002 trade disruption cost
  $7+ billion nationally

Environmental Impacts of Goods Movement

- Goods movement (GM) in Southern California a major source of air pollution
- Major GM sources of pollutant emissions in the region: Over-the-road trucks, rail locomotives, idling trucks/locomotives, yard and terminal equipment, and ships
- GM also having other environmental impacts in the region in terms of noise and water pollution.
  - Noise from terminal/yard equipment
  - Locomotive horns at grade crossings
  - Water pollution through run-offs at seaports and other goods movement terminals/yards.
  - Dredging activity at seaports also a major cause of water pollution

Environmental Impacts of Goods Movement

2005 Estimated Annual Average Emissions in South Coast Air Basin

	Pollutant				
Source	NOx	SOx	PM_{10}	$PM_{2.5}$	CO
Good Movement	34%	62%	3%	8%	2%
On-road mobile	37%	4%	5%	8%	65%
Other mobile	19%	1%	5%	12%	27%
Stationary	10%	33%	86%	72%	5%

Source: Final 2003 Air Quality Management Plan, South Coast Air Quality Management District.

Public Health Imperative: Reducing Port-Related Air Pollution

- Majority of emissions are from mobile sources, including ships
- Goods movement is a key contributor to air pollution and disease
- Diesel PM: A toxic air contaminant
- Without new control strategies, more cargo means more pollution

Environmental Enhancements

- The Ports of Long Beach and Los Angeles Clean Air Action Plan
- The Port of Oakland's Vision 2000 Maritime Development Program
- The State Goods Movement Action Plan and the California Air Resources Board Emission Reduction Plan

Funding Limitations

Crisis

- Highway gas tax
- SAFETEA-LU
- State diversion of transportation dollars
- Federal non-responsiveness

Opportunity

- Proposition 1B: $19.925 billion in State General Obligation bonds for transportation
- Coalition Building: Public-Private Partnerships
  - The Waterfront Coalition
  - West Coast Corridor Coalition

Other Issues

Truck safety concerns

- 84% of fatalities involving trucks are occupants of car
- Truck accidents up 17% between '00 and '03

At-grade crossings

- Impacts include noise, safety, emissions, congestion
- Projects are planned, shortfall in funding is prohibitive

Security

- Seaports and airports fund many security projects
- Congress evaluating effectiveness of security procedure

Other Issues

Modal Shifts and Trends

- E.g. -- trend in transload traffic
- Market response to reduce costs
- Public investments/policies lag market

Land Use Trends

- Warehouse develop. shifting east
- So are impacts on communities (noise, congestion, safety, emissions, etc)

System-wide GM data

- Flow patterns not fully reflected by travel demand data
- Lack of system-wide performance data and measures

Congestion Mitigation Fee Nexus Feasibility Study

May 2007

What is being explored?

Exploring a congestion mitigation fee that would…

- **Apply to all cities and the county**
- **Apply to all new development**
- **Address regional transportation impacts**
- **Cities would select projects consistent with agreed upon guidelines and administer program**
- **Program would meet existing CMP mitigation responsibilities**

Why being explored?

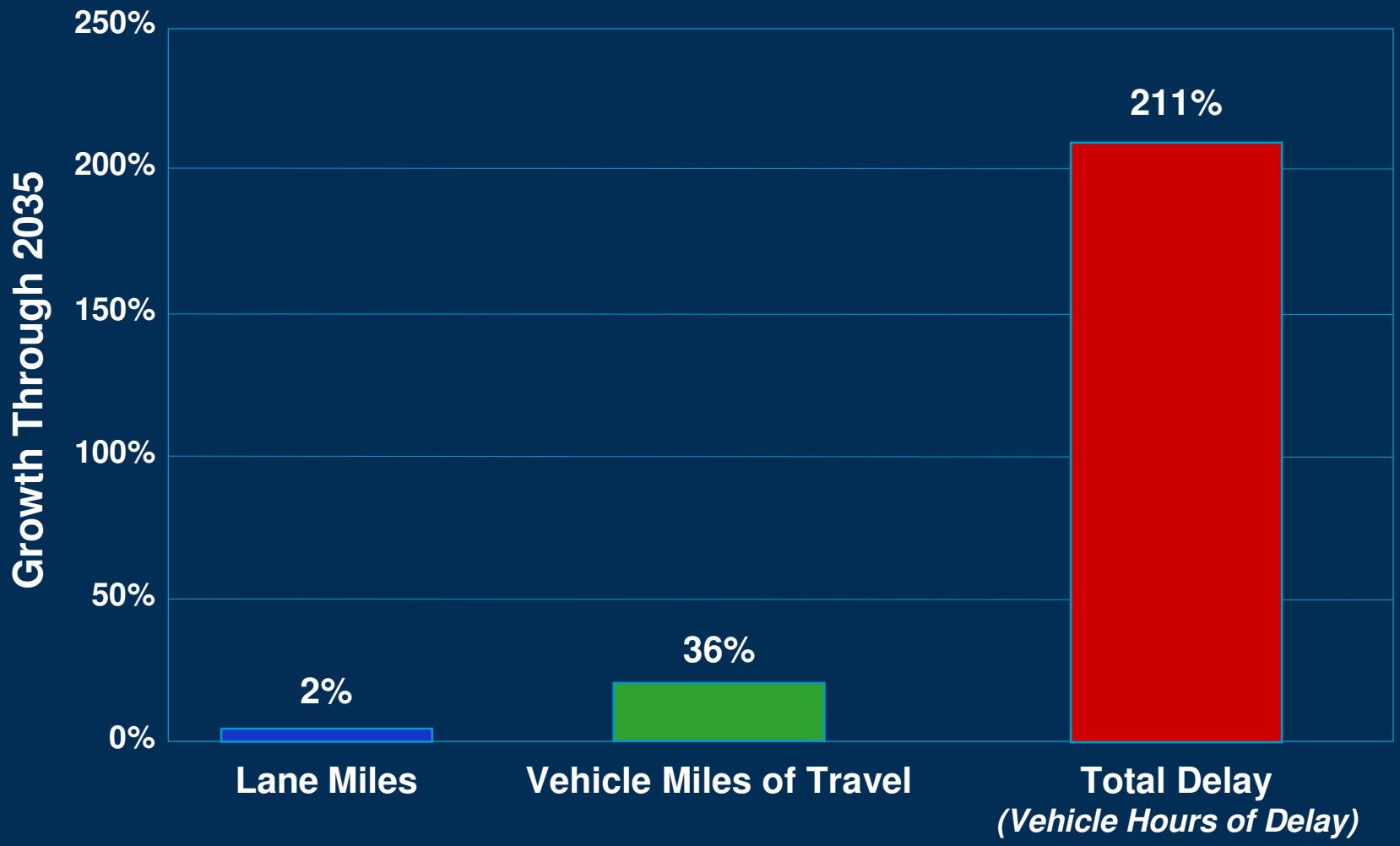
- Impact of growth on regional transportation system
- Impact of growth on communities
- Opportunity to grow transportation funding pie and for cities to fund unmet transportation priorities
- Existing CMP debit-credit does not bring in new revenue

Demographic Changes

	2004	2030	Increase	Percent
Population	9,836,000	12,193,000	2,357,000	24.0%
Employment	4,564,000	5,651,000	1,087,000	23.8%

Source: SCAG 2004 RTP

We Need Substantial Transportation Investment…

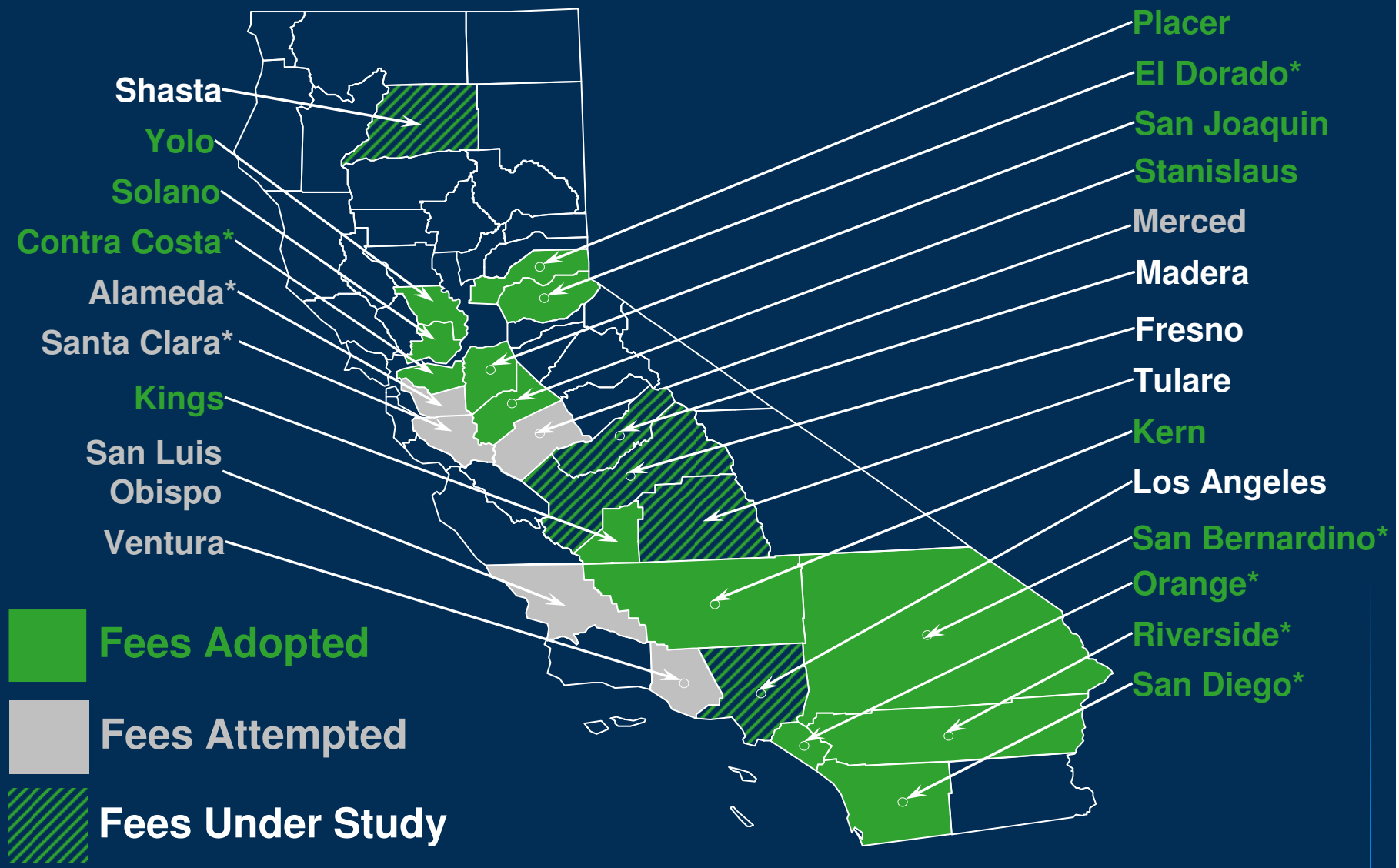


Metro Board Direction

- The Metro Board directed Metro staff to conduct a study to explore the feasibility of implementing a Countywide Congestion Mitigation Fee Program on new development

- Metro Report will include draft Program Guidelines

Countywide or Regional Public Facilities Fees



* Transportation fees only

Congestion Mitigation Fee
Program Objectives

- **Establish a regional mitigation program**
  - Meet regional mitigation requirements under CMP & CEQA
  - Replace CMP debit/credit program
  - Ensure continued flow of more than $95 million annually in gas tax revenue to local governments
- **Ensure local control**
  - Projects selected by each jurisdiction consistent with guidelines
  - Fee collected separately by each jurisdiction
  - Fee deposited in separate account with interest credited on fund balances
- **Generate new revenue for unmet transportation needs**
- **Provide a level playing field countywide**

Guiding Principles for Countywide Congestion Mitigation Fee Feasibility Study

- Fees should be structured to mitigate congestion from new development without discouraging economic development
- Fees are to augment other regional funds, not replace or redirect them
- Cities identify local projects with regional benefit consistent with agreed upon guidelines
- Cities adopt, collect, and administer congestion mitigation fees
- Cities build projects (or cities may choose to participate in multi-jurisdictional or regional projects, if mutually desired)

Guiding Principles for Countywide Congestion Mitigation Fee Feasibility Study (cont.)

- Cities with existing fee programs receive dollar-for-dollar credit for local projects with a regional benefit consistent with agreed upon guidelines
- Fees should be structured to support transit oriented development, and to exempt mixed use and high density residential development within ¼ mile of rail stations consistent with CMP statute
- The program will be developed in a manner to encourage certainty, predictability, and transparency among cities, business, environmental and development communities

Hypothetical Fee Revenue Ranges

Hypothetical Fee Ranges	Los Angeles County & All Cities Fee Revenue Annually	Los Angeles County & All Cities Fee Revenue 2005-2030
Higher End Scenario $16,000 (Santa Clarita)	$600 Million	$15 Billion
Mid-Range Scenario $6,650(Western Riverside COG)	$280 Million	$7 Billion
Lower End Scenario $2,000 (San Diego)	$80 Million	$2 Billion

Congestion Mitigation Fee Work Plan

- **Step 1: Feasibility Study** **Jan – Fall 2007**
  - 2 Rounds Outreach with COGs, Cities, Business
  - Monthly PAC meetings to develop Draft Program Guidelines
- **Step 2: Project Identification** **Winter 2007/2008**
  - Work with Cities to identify projects with regional benefits
  - Work with Cities to confirm growth forecasts
- **Step 3: Nexus Study** **Summer 2008**
  - Technical work effort to determine nexus
- **Step 4: Local Implementation** **Winter 2008/2009**
  - Work with Cities to adopt Local Ordinance

Outreach to Stakeholders
Developers, Cities & County, Regional Agencies & COGS

- **Established Policy Advisory Committee**
- **Continue Meeting with cities and COGs**
  - **7 COGs in October and November**
  - **Subregional workshops in January and February**
  - **One-on-one meetings with cities on request**
- **Meetings with key private sector interests in January and February**

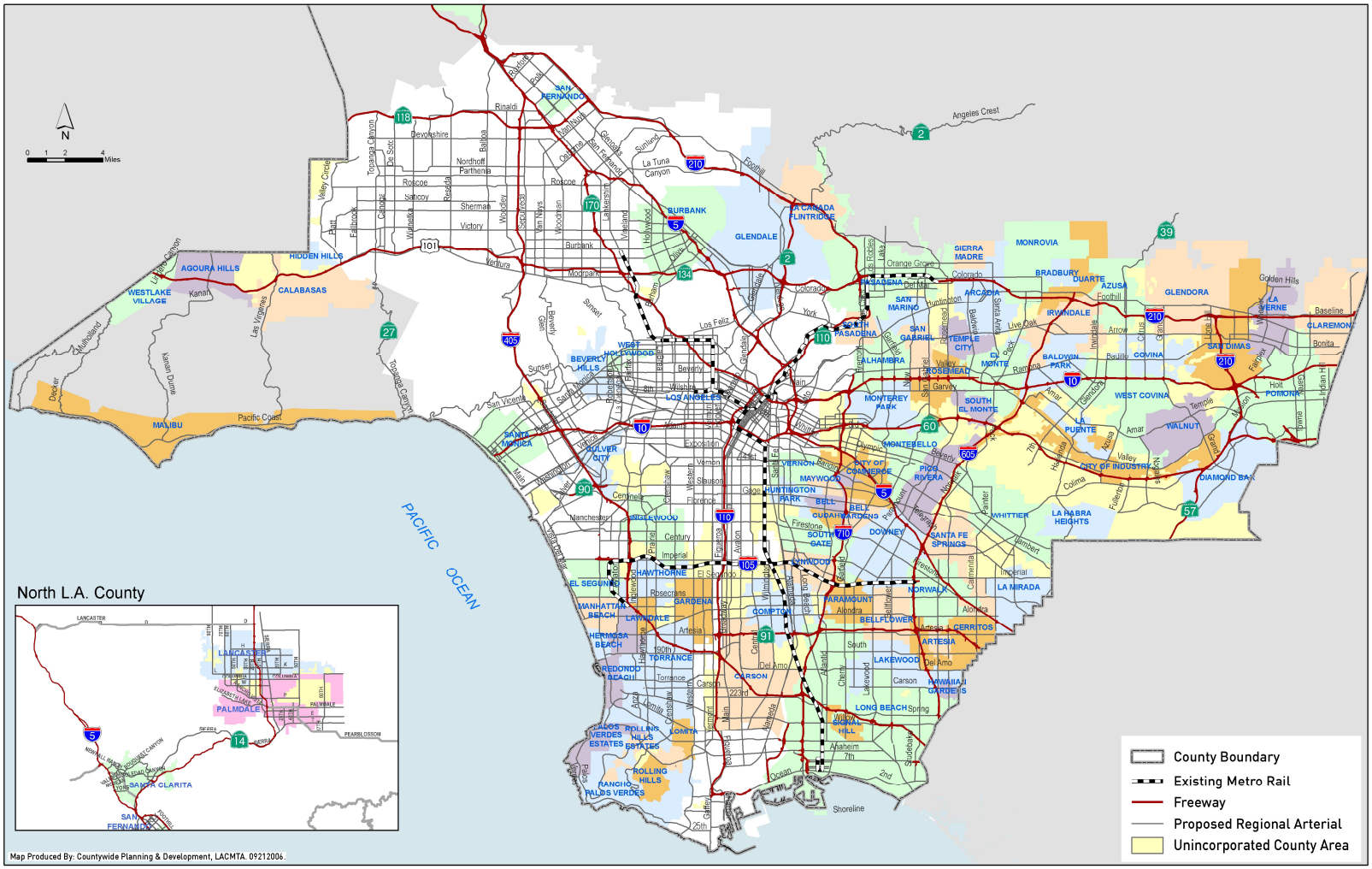
What We Have Heard…

- **Local Control**
- What are the fee amounts
- Entitlement process
  - Streamline entitlement process
  - Increase certainty of mitigation costs
- Reliable delivery of specific transportation improvements
- Credit for existing fee programs
- Addressing the needs of slow growth cities
- Flexibility in meeting program requirements
- Accommodate economic development concerns
- Paying fair share of total improvement costs
- Maintaining regional funding commitments by Metro

Program elements and options

- **Population forecasts**
  - Based on SCAG 2004 Regional Transportation Plan.
  - Can use local forecasts (i.e., General Plan assumptions)
- **Eligible projects – regionally significant local projects**
  - Major arterial, highway, and transit capital.
  - Preliminary regional arterial system (system can be modified in consultation with cities)
  - Projects should increase mobility on regional system.
  - Other regional projects may be eligible in consultation with cities.

Status of Feasibility Study:
Preliminary Regional Transportation System



Program elements and options (cont.)

- **Project selection**
  - Projects selected by cities
- **Fee amount**
  - To be determined in consultation with cities.
  - Fee calculator available to assist in analyzing fee levels.
- **Fee structure**
  - Options available for consideration include:
    - Minimum fee level countywide
    - Minimum fee by sub-region or groups of cities
    - Differing fee level by cities
    - Maximum fee level

Program elements and options (cont.)

- **Fee calculation method**
  - Fees calculated for all new development
  - Based on trips generated by land use categories
  - Proposed use of ITE trip generation rates
  - Subject to further discussion with PAC, cities and COGs
- **Exemptions (CMP exemptions)**
  - Low/very low income housing
  - High density residential or mixed-use within ¼ mile of rail station
  - Development agreements prior to July 10, 1989
  - Reconstruction or replacement of residential or non-residential damaged or destroyed by natural disaster
  - Any project of a federal, state, or county agency that is exempt for local jurisdiction zoning regulations

Program elements and options (cont.)

- **Credits for Existing Local Fee Programs**
  - Dollar for dollar credit for regionally significant local fee projects that would qualify under regional program.
- **Program would become local CMP Deficiency Plan**
  - Implementing fee required to fulfill existing local CMP mitigation responsibilities
  - Replace current debit-credit approach
  - Continues flow of Section 2105 State Gas Tax funding

Program elements and options (cont.)

- **Local Implementation Responsibilities**
  - Select projects
  - Collect fees and administer program
  - Report annually to Metro

Advantages for Building Industry

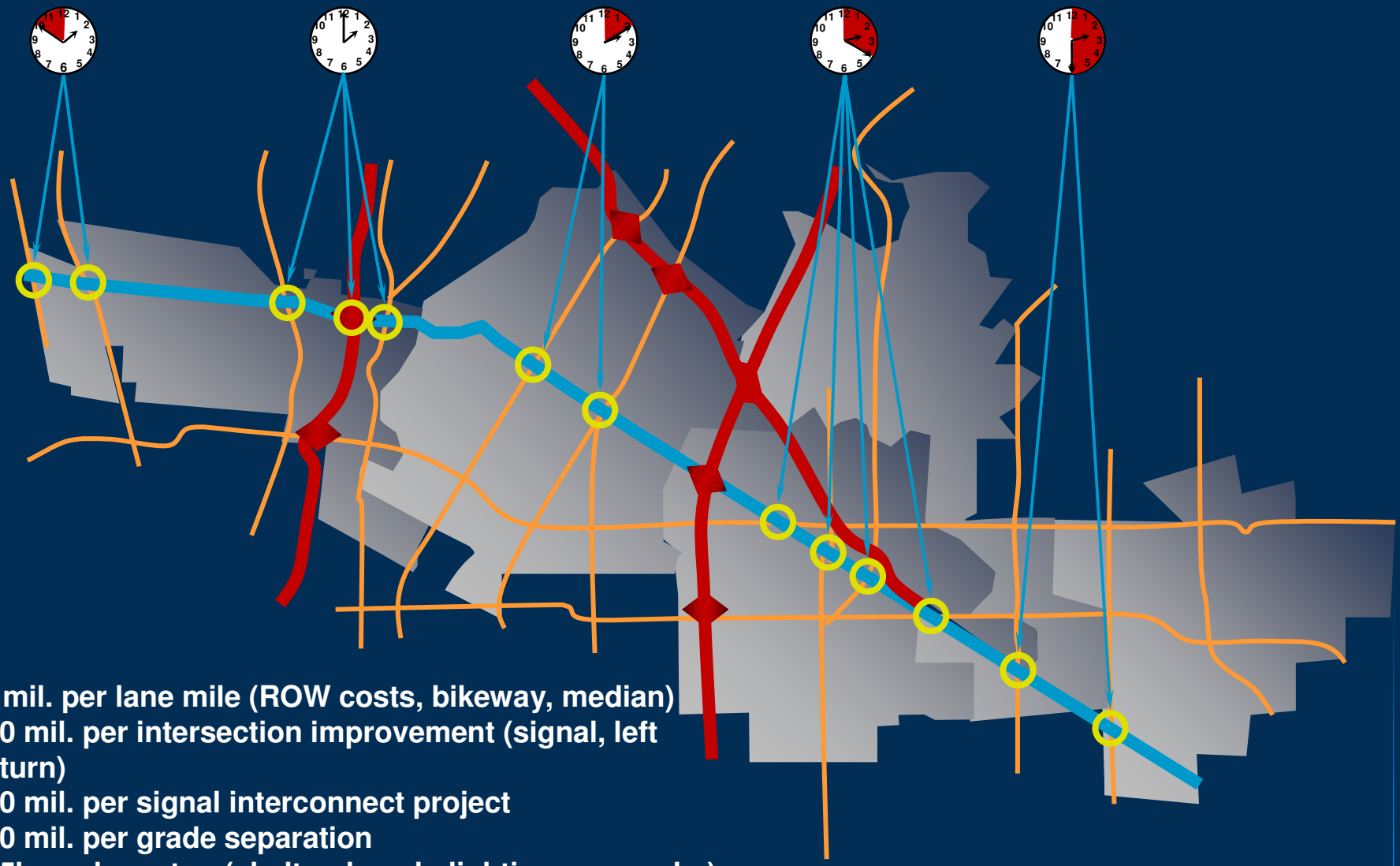
- Streamlines entitlements
- Potential to leverages regional, state and federal funds
- Provides more certainty in entitlement costs
- Includes all new development in regional mitigation
- Counters no-growth or slow-growth advocacy
- Addresses CEQA regional mitigation requirements
- All new development pays fair share

Opportunities for Cities

- New Source of Revenue for unmet needs - related to new development
- Cities determine projects, consistent with guidelines
- Cities can plan ahead to link infrastructure needs to growth
- Cities can encourage economic development by planning infrastructure needed to attract growth
- Cities can work together to pool funds for major projects

Case Study:

Arterial Enhancements/Signal Synch. - Multi-city project



$6 mil. per lane mile (ROW costs, bikeway, median)
$10 mil. per intersection improvement (signal, left turn)
$20 mil. per signal interconnect project
$50 mil. per grade separation
$25k per bus stop (shelter, bench, lighting, map cube)

Case Study:
Arterial Capacity Enhancements – Multi-city project

Project Elements	Quantity	Total Cost (Millions)	Project Fee*
New lane miles	15 miles	$90	$1,163
Intersection Imps.	10 intersections	$100	$1,293
Signal Interconnects	3 projects	$60	$776
Grade Separation	3 projects	$150	$1,929
Bus Stops	120 stops	$3	$40
Total		$403	$5,190

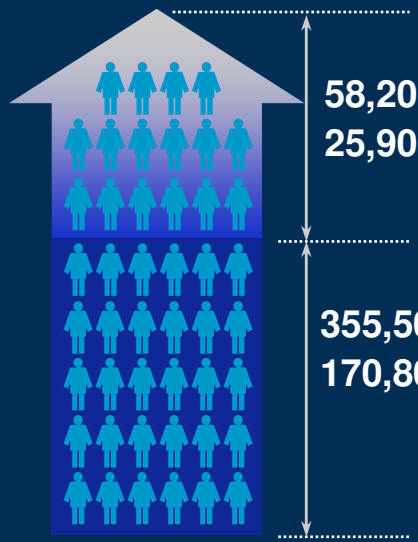
* Per Single Family Dwelling Unit

(Illustration purposes only)

How a Development Impact Fee Is Calculated
Four Basic Steps

Step 1

Verify population & employment forecast and convert to land use

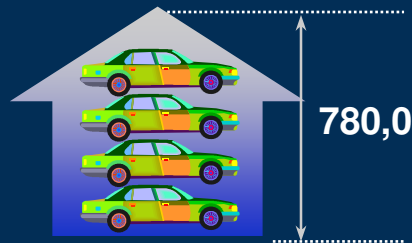


58,200 new residents
25,900 new employees

355,500 existing population
170,800 existing employees

Step 2

Convert growth to trip ends



780,000 new trip-ends

Adjust trip generation for exempt development

How a Development Impact Fee is Calculated (*Continued…)*

Step 3

Divide project cost by the total number of new trip ends to determine a cost per average daily trip

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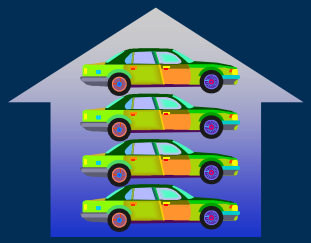

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$520 per trip end

$403 million

780,000 trip-ends

How a Development Impact Fee is Calculated (*Continued*)

Step 4
Generate a fee schedule based on each land use category's generation of average daily trips

$520 trip end

Land Use	Average Daily Trip Generation Rate	Fee Amounts
Single Family	9.9	$5,190
Multifamily	TBD	TBD
Office (1,000 sq. ft.)	TBD	TBD
Retail (1,000 sq. ft.)	TBD	TBD
Industrial (1,000 sq. ft.)	TBD	TBD
Hotel/Motel (room)	TBD	TBD

We Still Have Work To Do…

Road Map for Deliberations in 2007

Dates	Topic & Issues
February 2007	**Program Structure** • Countywide, sub-regional, or economic zone consistency • Total revenue requirement or adoption of a fee program • Fee calculation method: Land use categories • Exemptions
March 2007	**Capital Project Funding** • Multi-city collaboration • Regional matching funds • Program horizon • Maintenance of Effort
April 2007	**Implementation** • Cost escalation • Credit for demolition of existing buildings • Eligible uses of fee revenues (planning, design, engineering, etc.) • Delivery of capital projects • Reporting and monitoring requirements • Non-compliance
Summer 2007	**Draft Program Guidelines**

Next Steps

- Continue outreach to stakeholders
  - Meetings with cities, COGs, developers and other stakeholders
- Monthly PAC meetings – February - May
  - Continue discussing issues and program elements
- Draft Program Guidelines – preliminary recommendations - Summer
- Outreach and review of Draft Program Guidelines – Summer
- Draft Program Guidelines Presented to Metro Board - Fall
- More information: